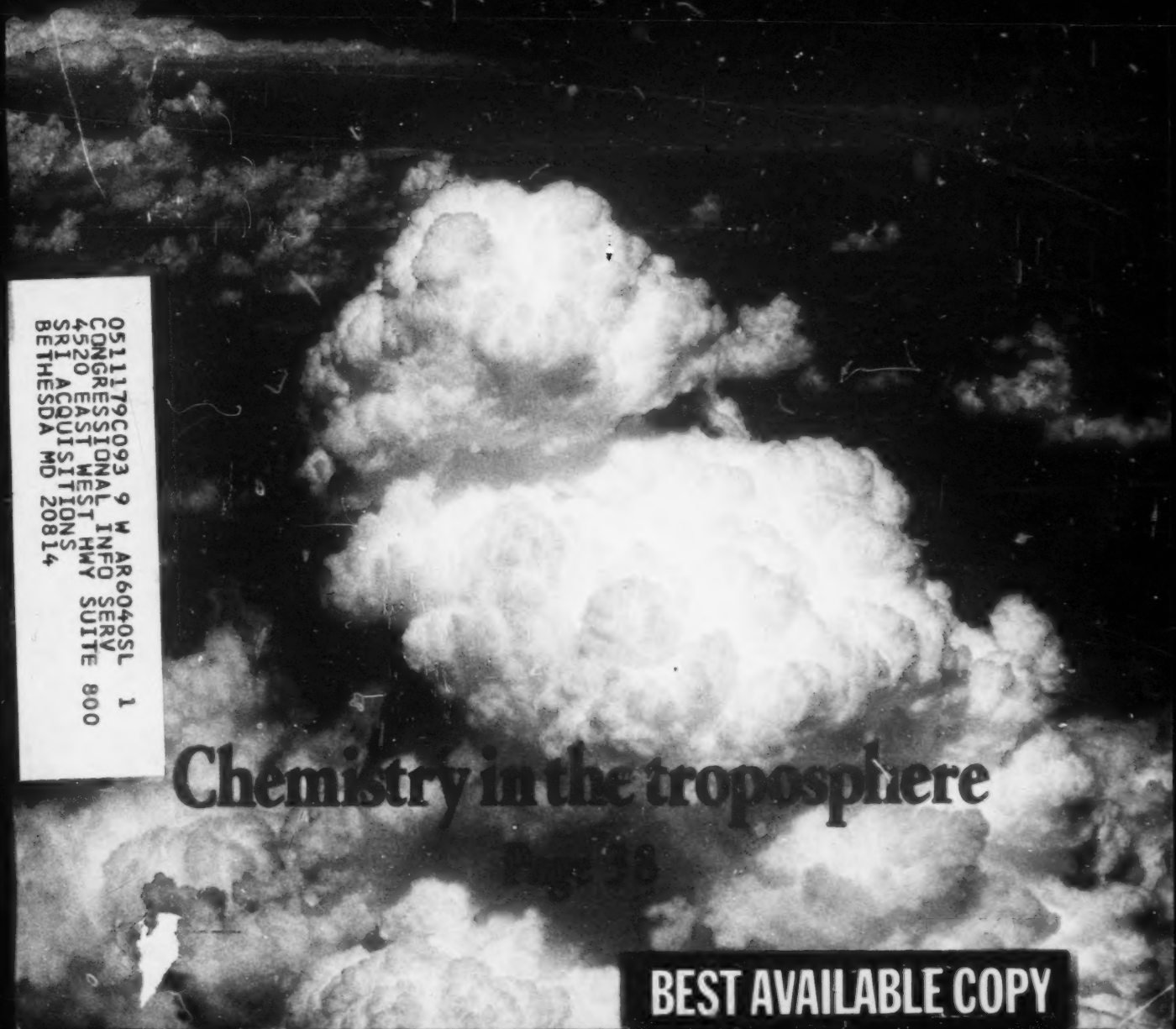
Chemical & Engineering NEWS

A1250-1 10/5/82



05111179C093 9 W AR6040SL 1
CONGRESSIONAL INFO SERV
4520 EAST WEST HWY SUITE 800
SRI ACQUISITIONS
BETHESDA MD 20814

Chemistry in the troposphere

Page 18

BEST AVAILABLE COPY

October 4, 1982
Volume 60, Number 40
CENEAR 60 (40) 1–68
ISSN 0009-2347

Chemical & Engineering NEWS

Cover: Photo courtesy of Photofile Intl./A. J. Hartman

2 Letters
3 Editor's Page

Concentrates
7 Business
13 Government
17 Science/Technology

The Departments
55 Meetings
68 Newscripts

News of the Week

- ***Communication of most university research*** *should not be controlled, says NAS panel on science and national security.* ***Page 4***
- ***Existing laws are inadequate*** *to cope with small claims of toxic exposure, panel says; suggests alternatives.* ***Page 4***
- ***Allied's acquisition of Bendix*** *will make it a highly diversified company.* ***Page 5***
- ***Derailment of train*** *carrying chemicals causes evacuation of 3200.* ***Page 5***
- ***Monsanto abandons polyester staple*** *to concentrate on nylon fiber.* ***Page 6***
- ***American Cyanamid will lay off 75*** *research workers at Bound Brook, N.J.* ***Page 6***

Business

- ***Signs that the economy is recovering*** *has some analysts optimistic about a pickup in housing and automobiles.* ***Page 8***
- ***Union Carbide's reorganization*** *poises two executives for top posts.* ***Page 9***

International

- ***Council of scientific unions*** *expands its membership and programs.* ***Page 10***

Government

- ***Merits of patents vs. trade secrets,*** *aspects of risk assessment of chemicals are probed at ACS meeting sessions.* ***Page 14***

Science

- ***From the Kansas City meeting:*** *progress in nonlinear optical materials, science implications of "information age," new rationale for primordial gene code, laser for probing semiconductors, intercalated graphites developments, tobacco flavor findings, microbore HPLC-FTIR in mixture analyses, grain contamination problem, polymer coating for boosting electrode selectivity, synthesis of tsetse fly pheromone, polymers for inhibiting frost damage in crops.* ***Page 18***

Technology

- ***More from Kansas City:*** *current status of U.S. coal liquefaction effort; overview of research on anchored catalysts.* ***Page 31***

Education

- ***Chemical research at undergraduate level*** *deemed important in educational process, but funds are scarce.* ***Page 36***

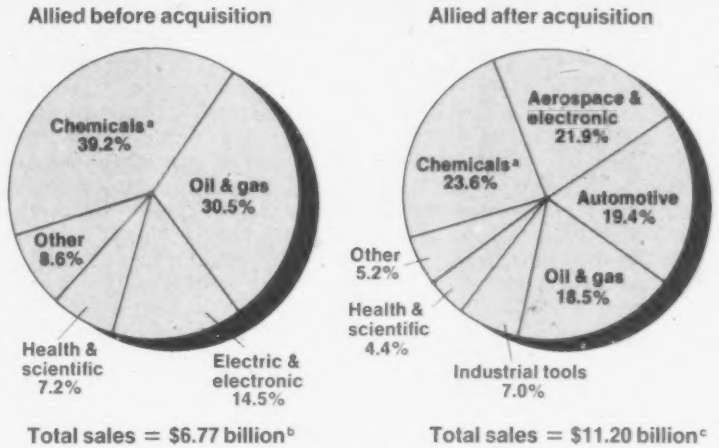
Special Report

Chemistry in the troposphere *probed using advanced techniques; some atmospheric trace gases and aerosols found to have major environmental impact.* ***Page 38***

ACS News

- ***Plan to charge emeritus members for C&EN defeated*** *by council.* ***Page 53***

Allied becomes conglomerate with acquisition of Bendix



a Includes fibers and plastics. b Based on Allied's 1981 results, including full-year results for Fisher Scientific, acquired by Allied in fourth-quarter 1981. c Based on 1981 results for Allied and Bendix, including full-year results for Fisher Scientific, acquired by Allied in fourth-quarter 1981.

securities in the merger. Each Bendix share will be valued at about $85.

Allied says that William M. Agee, chairman of Bendix, will continue as Bendix chairman and chief executive officer and will become president and a director of Allied. Two other Bendix executives will become Allied directors. Bendix will be operated as a separate subsidiary of Allied and will remain headquartered in Southfield, Mich. □

Monsanto bows out of polyester staple

Strike Monsanto from the dwindling list of U.S. polyester staple fiber producers. The company is shutting its polyester staple plant at Decatur, Ala., which has a capacity of about 120 million lb per year.

This is the last of Monsanto's interests in polyester fiber. Early in 1981, it sold to Celanese a 70 million lb-per-year polyester filament plant in Fayetteville, N.C. At the same time, it closed another plant, of similar capacity, at Sand Mountain, Ala.

The action is, in part, an indication of the continuing problems facing the polyester fiber business, both for staple and filament. This summer, for example, Celanese cut its capacity for polyester filament, slashing maximum output from about 450 million lb per year to 250 million lb (C&EN, May 31, page 7).

Monsanto has decided, instead, to concentrate on its nylon fiber business, in which it is a far more significant factor, probably the second largest producer in the U.S. At the same time Monsanto announced the exit from polyester, it disclosed plans to convert two thirds of its nylon flat feeder yarn capacity to partially oriented nylon yarn at Pensacola, Fla. This modification, which will not change the capacity total, is expected to be completed by mid-1984.

"This project will enable Monsanto to keep pace with our downstream customers, the throwsters who are investing in advanced-generation draw texturing equipment, by providing a fiber that they can use on their new machinery," says Robert E. Burke, managing director of Monsanto Textiles Co.

Primary end uses for partially oriented nylon are women's hosiery, men's socks, and active wear. □

Monsanto still is one of biggest nylon producers . . .

	Capacity (millions of lb)
Du Pont	1375
Monsanto	560
Allied	455
Akzona	210
Badische	145
TOTAL	2745

. . . but in polyester, its exit leaves four majors

	Capacity (millions of lb)
Celanese	970
Du Pont	963
Eastman	450
American Hoechst	355
TOTAL	2738

Cyanamid to lay off 75 lab employees

Troubled by the state of the economy, more chemical producers have turned to layoffs of laboratory workers as part of their efforts to cut costs. The latest is American Cyanamid Co., which will shut down almost all research at its Bound Brook, N.J., site and fire 75 persons, most of them technical.

The biggest layoff of laboratory workers to date is at Celanese, which has let 172 people go at Summit, N.J., and Corpus Christi, Tex. Still other layoffs have occurred at Gulf Research & Development Co., a part of Gulf Oil.

American Cyanamid will consolidate all of its chemical research in Stamford, Conn., and eliminate 129 jobs at Bound Brook. Only 54 of these persons will be offered transfers within the company. Some process research will continue at Bound Brook on behalf of the firm's Lederle Laboratories subsidiary. Edward W. Cantrall, director of research for Cyanamid's chemical division, said the decision is part of a continuing program to improve profitability of the chemical business by concentrating on research programs that meet long-term objectives and eliminating those that do not. In addition to severance pay and other benefits, Cyanamid has offered outplacement assistance.

Similar desires to reduce efforts on mature products led Celanese to lay off 130 of the 560 salaried people at its corporate research center in Summit, N.J., and 42 out of 278 employees at the Celanese Chemical Co. technical center in Corpus Christi. The company also gave outplacement assistance as well as other benefits during August, when the layoff occurred.

Gulf Research & Development notified 60 of the 1500 people at its Harmarville, Pa., laboratory on Sept. 17 that their jobs would end effective Nov. 11. A company spokesman said the move was part of a program to streamline their efforts and reduce costs.

Though PPG laid off 200 people in its glass fiber division during September, only 10 of these were at the research center near Pittsburgh, says a company spokesman. The firm also closed a laboratory associated with the chemical division in Corpus Christi. PPG's glass division also has reduced employment about 20%, most of that gradually in 1982. □

BEST AVAILABLE COPY